

STEPTOE & JOHNSON ^{LLP}
ATTORNEYS AT LAW

Pantelis Michalopoulos
202.429.6494
pmichalo@steptoe.com

1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Tel 202.429.3000
Fax 202.429.3902
steptoe.com

November 17, 2010

FILED ELECTRONICALLY

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th St. S.W.
Washington, D.C. 20554

Re: Ex Parte Submission, Establishment of a Model for Predicting Digital Broadcast Television, ET Docket No. 10-152; Field Strength Received at Individual Locations Measurement Standards for Digital Television Signals Pursuant to the Satellite Home Viewer Extension and Reauthorization Act of 2004, ET Docket No. 06-94

Dear Ms. Dortch:

DIRECTV, Inc. and DISH Network L.L.C. file for the record of this proceeding a further report prepared by their engineering expert, Christopher Kurby. In that report, Mr. Kurby cites and discusses an additional study, based on empirical evidence, and confirming the reasonableness of the values he has proposed for losses of signal strength associated with the penetration of building walls.

Sincerely,

_____/s/____

Pantelis Michalopoulos
Counsel for DISH Network L.L.C.

Attachment

Building Penetration Loss and Standard Deviation of Building Loss

At a meeting that DISH and DIRECTV representatives, including myself, held with the Office of Engineering and Technology on November 15, I presented my proposed conservative values for building penetration loss. These values are further confirmed by the Chester 1997 Multilateral Coordination Agreement on Terrestrial Digital Video Broadcasting [1].

Specifically, we propose using the Median building penetration loss and standard deviation of building loss as presented exactly by the Chester study as seen below. These values are more conservative because they do not include large buildings as most of the other studies do. They also are now included in the Broadcast Engineers reference book [2].

Building Penetration Loss

Band	Median Value	Standard Deviation
VHF	8dB	3dB
UHF	7dB	6dB

From our previous work, we note that the Median loss at L-VHF is higher than VHF is higher than VHF and elect to use 8dB for that but retain the same sigma as VHF. Further we now include a table that gives Median, 90% and 95%tile of only building penetration loss.

Building Penetration Loss Vs Reliability

	L-VHF	VHF	UHF
Median	9dB	8dB	7dB
Sigma	3dB	3dB	6dB
90%tile	13dB	12dB	15dB
95%tile	14dB	13dB	17dB

We propose using these values in FCC planning together with the ILLR model and the antenna height and gain factors of our November 4 *ex parte* submission. We note that the ILLR model already uses a statistic for median clutter of 3 to 8 dB in Tables 2 and 3 of OET72. These variables have an unspecified situational variability but are still used by the FCC regardless. Our proposal is no different, and the mean losses and sigma's values are already used in Europe and are included in the Broadcast Engineers Reference book [2].

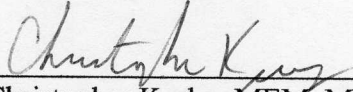
[1] The Chester 1997 Multilateral Coordination Agreement relating to Technical Criteria, Coordination Principles and Procedures for the introduction of Terrestrial Digital Video Broadcasting (DVB-T) Chester, European Conference of Postal and Telecommunications Administrators, 25 July 1997.

[2] E.P.J. Tozer, *Broadcast Engineers Reference Book*, Focal Press E.P.J., Burlington Ma. Pg. 771, sec. 6.4.5.2.3.

DECLARATION

I, Christopher Kurby, declare that I have prepared the foregoing engineering analysis using facts of which I have personal knowledge or upon information provided to me. I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge and belief.

Executed on November 17, 2010.


Christopher Kurby, MEM, MEE, BSEE